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CD-ROM Drive
EXTCDR-1
OPERATION MANUAL

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Notice for Users in the USA

FCC Statement

WARNING - FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

A shielded I/F cable is required to ensure compliance with FCC Regulation for Class B computing equipment.

Declaration of Conformity

Dell EXTCDR-1

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party: Dell Computer Corporation
One Dell Way
Round Rock, Texas
512-338-4400

CAUTION about CD-ROM Drive

This product utilizes a laser.

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Do not open covers and do not repair the drive yourself. Refer servicing to qualified personnel.

| Laser diode properties | |
|------------------------|------------------------|
| Material | AlGaAs |
| Laser output | Less than 48.5 μ W |
| Wave length | 785nm |
| Emission duration | Continuous |

(This output is the value measured at the distance of 200 mm from the objective lens surface.)



Notice for Users in Europe

This equipment complies with the requirements of Directives 89/336/EEC and 73/23/EEC as amended by 93/68/EEC.

Dieses Gerät entspricht den Anforderungen der EG-Richtlinien 89/336/EWG und 73/23/EWG mit Änderung 93/68/EWG.

Ce matériel répond aux exigences contenues dans les directives 89/336/CEE et 73/23/CEE modifiées par la directive 93/68/CEE.

Dit apparaat voldoet aan de eisen van de richtlijnen 89/336/EEG en 73/23/EEG, gewijzigd door 93/68/EEG.

Dette udstyr overholder kravene i direktiv nr. 89/336/EEC og 73/23/EEC med tillæg nr. 93/68/EEC.

Quest' apparecchio è conforme ai requisiti delle direttive 89/336/EEC e 73/23/EEC, come emendata dalla direttiva 93/68/EEC.

Η εγκατάσταση αυτή ανταποκρίνεται στις απαιτήσεις των οδηγιών της Ευρωπαϊκής Ένωσης 89/336/ΕΟΚ κατ 73/23/ΕΟΚ, όπως οι κανονισμοί αυτοί συμπληρώθηκαν από την οδηγία 93/68/ΕΟΚ.

Este equipamento obedece às exigências das directivas 89/336/CEE e 73/23/CEE, na sua versão corrigida pela directiva 93/68/CEE.

Este aparato satisface las exigencias de las Directivas 89/336/CEE y 73/23/CEE, modificadas por medio de la 93/68/CEE.

Denna utrustning uppfyller kraven enligt riktlinjerna 89/336/EEC och 73/23/EEC så som komplette ras av 93/68/EEC.

Dette produktet oppfyller betingelsene i direktivene 89/336/EEC og 73/23/EEC i endringen 93/68/EEC.

Tämä laite täyttää direktiivien 89/336/EEC ja 73/23/EEC vaatimukset, joita on muutettu direktiivillä 93/68/EEC.

CE Notice

Marking by the symbol **CE** indicates compliance of this Dell system to the EMC (Electromagnetic Compatibility) directive and the LVD (Low Voltage Directive) of the European Union. Such marking is indicative that this Dell system meets or exceeds the following technical standards:

- EN 55022 — “Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment.”
- EN 50082-1:1992 — “Electromagnetic compatibility—Generic immunity standard Part 1: Residential, commercial, and light industry.”
- EN 60950 — “Safety of Information Technology Equipment.”

Note: *EN 55022 emissions requirements provide for two classifications:
Class A for typical commercial areas.
Class B for typical domestic areas.*

IC Notice (Canada Only)

Most Dell computer systems (and other Dell digital apparatus) are classified by the Industry Canada (IC) Interference-Causing Equipment Standard #3 (ICES-003) as Class B digital devices. To determine which classification (Class A or B) applies to your computer system (or other Dell digital apparatus), examine all registration labels located on the bottom or the back panel of your computer (or other digital apparatus).

A statement in the form of “IC Class A ICES-3” or “IC Class B ICES-3” will be located on one of these labels.

Note that Industry Canada regulations provide that changes or modifications not expressly approved by Dell Computer Corporation could void your authority to operate this equipment.

This Class B (or Class A, if so indicated on the registration label) digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la Classe B (ou Classe A, si ainsi indiqué sur l'étiquette d'enregistrement) respecte toutes les exigences du Règlement sur le Matériel Brouilleur du Canada.

Safety Precautions

WARNING:

- The power source voltage of the AC adapter is listed on the nameplate. Plug the AC adapter only into an outlet with proper voltage (AC adapter may not be available in some countries).
- To prevent fire or shock hazard, do not expose this product to rain or any type of moisture.

CAUTION:

- When you operate this equipment with the AC adapter, the power socket/outlet should be near the equipment and should be easily accessible (AC adapter may not be available in some countries).
- To prevent static electricity damage, before touching the unit, discharge any static electricity from your hands by touching a grounded metal surface.

CAUTION FOR LASER:

This product utilizes a laser.

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Do not open covers and do not repair the drive yourself. Refer servicing to qualified personnel.

| Laser diode properties | |
|------------------------|------------------------|
| Material | AlGaAs |
| Laser output | Less than 48.5 μ W |
| Wave length | 785nm |
| Emission duration | Continuous |

(This output is the value measured at the distance of 200 mm from the objective lens surface.)



General

- Follow all cautions and instructions marked on the CD-ROM drive.
- Do not disassemble the CD-ROM drive or repair it yourself. It may cause electrical shock hazard, or the laser may damage your eyes.
- Except as described elsewhere in this manual, refer all servicing to qualified personnel. Immediately shut off the CD-ROM drive and refer for servicing under the following conditions:
 - When the power cord or plug is damaged or frayed (AC adapter may not available in some countries).
 - If liquid has been spilled on the CD-ROM drive.
 - If the CD-ROM drive has been dropped or the cabinet has been damaged.

Location

- Do not leave the CD-ROM drive in direct sunlight, near a heat source or in a hot automobile.
- Do not store or use the CD-ROM drive in a dusty, humid or oily environment, or under damp or moist conditions.
- Keep magnetic objects away from the CD-ROM drive.
- When the CD-ROM drive has been moved from a cold to warm location, it may become damp or moist. Let the CD-ROM drive sit for about 1 hour before using it.

Usage

- Do not touch the pins/terminals of the PC card or interface cable.
- Do not touch the lens.
- Never subject the CD-ROM drive to sudden shocks or extreme vibration.
- Do not drop or jar the CD-ROM drive.
- If noise is heard from a nearby radio or TV, move the CD-ROM drive about 6 feet (2m) away from the radio or TV.
- Do not use any other PC card with the CD-ROM drive, except the included PC card.
- Turn off the CD-ROM drive and disconnect the AC cord before cleaning (AC adapter may not available in some countries).
- Do not travel with a CD in the CD-ROM drive.

- Do not insert any foreign metal object inside the CD-ROM drive.
- Do not turn up the volume too high when using the headphones.

AC Adapter Precautions (AC adapter may not be available in some countries)

- Use only the included AC adapter.
- Plug the AC adapter securely into a wall outlet.
- Do not plug/unplug the AC adapter with wet hands.
- Remove any dust on the AC adapter.
- Immediately shut off the CD-ROM drive and refer for servicing under the following conditions:
 - When the AC adapter is damaged
 - If smoke, foul smell or abnormal sound comes from the AC adapter

CD Precautions

- Do not scratch, smudge, write on or label either surface of a CD.
- Do not leave the CD in direct sunlight, near a heat source or in a hot automobile.
- Do not touch the data side (the side without the label) of a CD. Avoid leaving fingerprints and scratches while holding it.
- Do not throw or bend a CD.

Manual Conventions

This manual uses a set of style conventions described below.

Notes and Cautions are italicized with icons:



A note icon informs you of a special technique or information that may help you perform a task or better understand a process.



A caution icon alerts you to something that may cause problems or damage to hardware, software or data.

Key Labels on the Keyboard, when referred to in the instructions, are shown in boldface:

Press **Enter** to continue.

When more than one key is pressed simultaneously, the key labels are separated by a plus (+) sign:

Restart your computer by pressing **Ctrl+Alt+Delete**.

When necessary, important key combinations are shown in graphics:



Sample Entries are shown in upper cases of a different typeface. In the following case, press the Enter key after you type the command:

C:\>DIR A: **Enter**

Words/Texts on Screen, such as window titles or possible parameters, are italicized:

Double-click this icon to display the *Power Properties* window.

Set the item to *Enabled*.

Screens reproduced in this manual may differ slightly from the screens you see on your computer.

Section Titles in other parts of this manual are italicized:

Refer to *Infrared Communication* section in Chapter 5.

Unpacking the CD-ROM Drive

Make sure that the following items are included with the CD-ROM drive. If anything is missing, contact your sales representative.

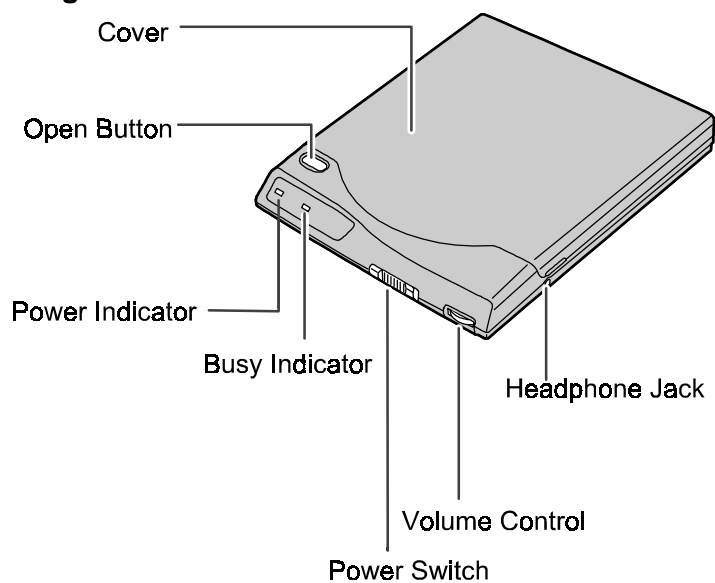
- CD-ROM drive
- Interface cable
- PC card
- AC adapter (may not be available in some countries)



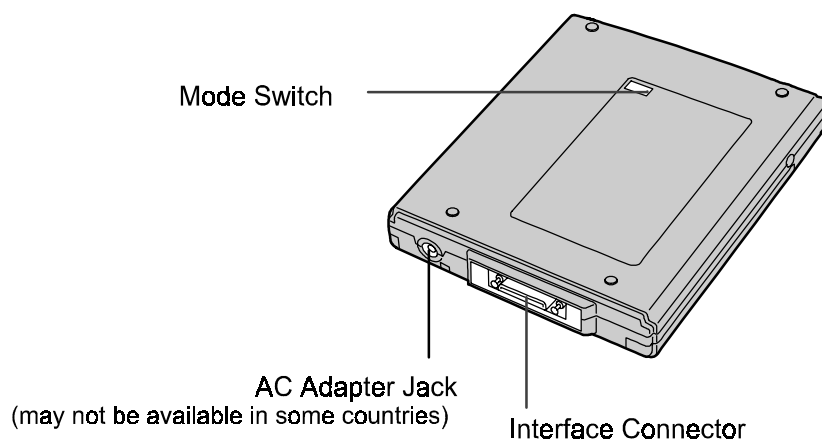
Before using your CD-ROM Drive for the first time, please read the Dell Software License Agreement in this document.

Taking a Look at the CD-ROM Drive

Front and Right Side



Rear and Bottom Side

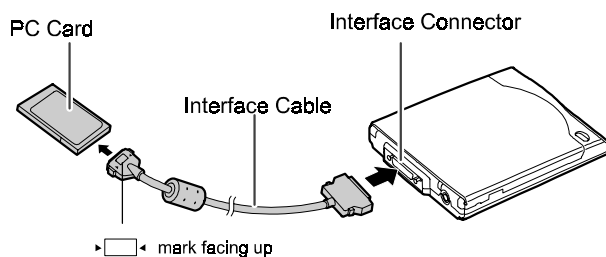


Connecting the CD-ROM Drive to Your Computer


Before using the CD-ROM drive for the first time, remove the protective sheet.

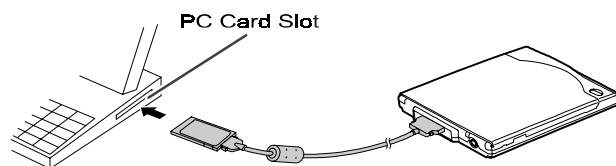


1. Connect the PC card to the interface cable.
2. Connect the interface cable to the interface connector of the CD-ROM drive.



Use only the supplied PC card and interface cable with this CD-ROM drive.

3. Insert the PC card into the PC card slot of your computer firmly with the  mark facing up.



Your computer will beep when the PC card is inserted. *The New Hardware Found* window appears, and the CD-ROM drive is automatically turned on. When this window disappears, setup of the CD-ROM drive will be completed.

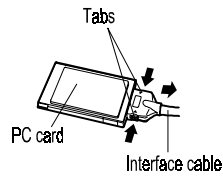


The supplied PC card supports the Plug & Play. With the computer turned on, you can insert the PC card the driver is pre-installed on your hard drive.

Removing the CD-ROM Drive

The supplied PC card supports Plug & Play. With the computer turned on, you can insert/remove the PC card. Before removing the PC card, perform the following steps.

1. Click PC card icon on the task bar.
2. Click *Stop PCMCIA ATA card*.
3. Make sure that the message *You may safely remove this device* is displayed; then click *OK*.
4. While pressing the side tabs of the connector, pull the interface cable straight.



5. Remove the PC card.



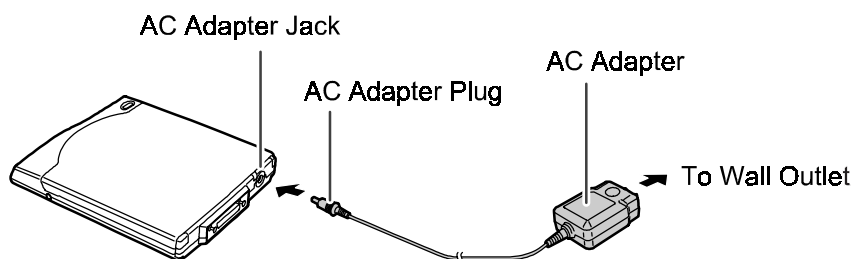
Do not force the interface cable since this could damage the PC card or interface cable.

Connecting the AC Adapter



The AC adapter may not be available in some countries.

Power can also be supplied from the PC card slot. However, using the AC adapter provides faster data transfer and shorter access time.

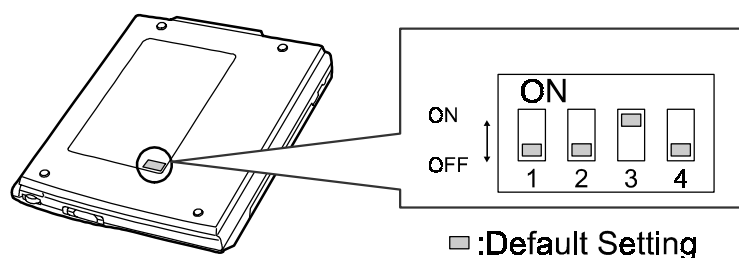


- *When you do not plan to use the CD-ROM drive for a long time, unplug the AC adapter from the wall outlet.*
- *The AC adapter is universal voltage. However, its plug is designed for use only in the country where it was purchased.*

Mode Settings

Normally the CD-ROM drive can be used without changing the mode settings. However, if you wish to change a setting, set the switches (No. 1 to No. 3) to on or off with a pointed object like a pen.

Before changing a mode setting, make sure that the CD-ROM drive is empty.



- Switch No. 4 is used for manufacturer service mode. Make sure that you use the CD-ROM drive with this switch set to Off.
- Set switch No. 1 to Off if you do not use the AC adapter (AC adapter may not be available in some countries).

| Switch No. | Mode | Setting | Description |
|------------|----------------------|---------|--|
| 1 | AC adapter only mode | On | The CD-ROM drive can be used only when you are using the AC adapter. The CD-ROM drive cannot be turned on when you are using power from the PC card slot. |
| | | Off | The CD-ROM drive can be used with power from the PC card slot. If power is supplied from both the AC adapter as well as the PC card slot, AC power has priority over the power supply from the PC card slot. |


| Switch No. | Mode | Setting | Description |
|------------|--|---------|---|
| 2 | Power Save mode ^{*1} (Power from the PC card slot) | On | The CD-ROM drive functions in Power Consumption Save mode (hereafter Power Save mode). If the computer's operation is unstable in Power Consumption Normal mode (hereafter Normal mode) or the computer is used for a long time with battery, set this mode to On. (Data transfer rate is max. 6x.) |
| | | Off | The CD-ROM drive functions in Normal mode. (Data transfer rate is max. 12x.) |
| 3 | Vibration detection mode ^{*2} | On | Vibration detect function works while a CD is spinning. It automatically slows down the spin speed of a CD when the CD vibrates a lot. |
| | | Off | Vibration detect function does not work while a CD is spinning. |

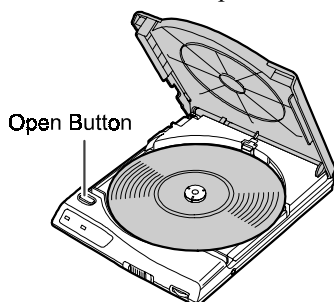
*1 The CD-ROM drive cannot be used with power from the PC card slot if the computer's operation is unstable, even when the switch No. 2 is set to On (Power Save mode). In this case, connect the AC adapter and set the switch No. 1 to On (AC adapter may not be available in some countries).

*2 This mode is effective only when you are using the AC adapter. When the vibration detect function works, the data transfer rate is slowed from max. 20x to max. 16x (AC adapter may not be available in some countries).

Inserting and Removing a CD

Inserting a CD

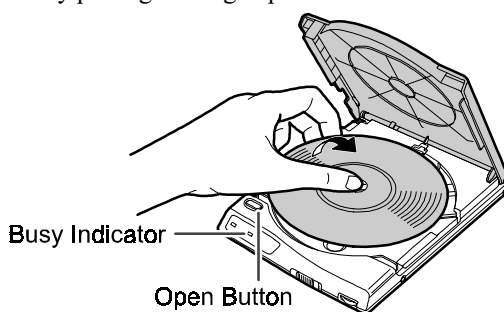
1. Make sure the Busy Indicator is not lit.
2. Press the Open Button and open the cover.
3. Place your CD onto the disc spindle.
4. Press on the center of the CD until it locks onto the disc spindle.
5. Close the cover and press  on the cover until you hear a clicking sound.




Insert a CD firmly until it locks onto the spindle and then close the cover, or the CD may fall off the spindle and be damaged.

Removing a CD

1. Make sure the Busy Indicator is not lit.
2. Press the Open Button and open the cover.
3. Make sure the CD is not spinning and press on the disc spindle, and then lift the CD by pulling the edge up.



4. Close the cover and press  on the cover until you hear a clicking sound.

About the Power Switch

Power to the CD-ROM drive is automatically turned on/off when the computer's power is turned on/off. Similarly, if the PC card is inserted/removed with the computer turned on, the power of the CD-ROM drive is automatically turned on/off. (The Power indicator is lit (green) when the CD-ROM drive is turned on.) However, the power to the CD-ROM drive may not be turned off when the computer is turned off depending on the method of shutdown (Suspended, Resumed, etc.). In this case, turn off the CD-ROM drive manually by sliding its Power switch.



- *It is recommended that you use the computer with AC power. If the CD-ROM drive is used with power from the PC card slot, the computer's battery may be consumed more quickly. When the computer indicates "Battery low," immediately connect the AC adapter to the computer.*
- *When using power from the PC card slot, the PC card consumes approximately 0.1 W of power even if the CD-ROM drive is turned off. The computer may also supply power to the PC card when it is in Resume (Power Save) mode. When you do not plan to use the CD-ROM drive for a long period, it is recommended that you remove the PC card to save power. For insertion/removal of the PC card, refer to pages 4-5.*
- *When the PC card is inserted with the computer turned off, the CD-ROM drive may be automatically turned on depending on the computer's status (this is not abnormal).*

Operating a CD-ROM Drive



When the busy indicator (amber) is lit or blinking, observe the following precautions, as data is being transferred between the CD-ROM drive and the computer.

- *Do not open the cover.*
 - *Do not disconnect the PC card.*
 - *Do not slide the power switch of the CD-ROM drive.*
 - *Do not disconnect the AC adapter if the AC adapter is being used (AC adapter may not be available in some countries).*
-



Some types of CDs (game CD with audio track, CD-Extra, Photo CD) allow you to listen to sound or music through the headphones/external speaker system (not supplied) with the headphone jack of the CD-ROM drive. Connect the headphones/external speaker system (not supplied) to the headphone jack of the CD-ROM drive.

Playing an Audio CD

You can operate an audio CD on the computer using audio CD player software. Sound can be heard through the headphone jack of the CD-ROM drive.



To listen to sound or music of an audio CD, connect the headphones/external speaker system (not supplied) with the headphone jack of the CD-ROM drive.

If an audio CD does not play automatically, refer to the operating system manual.

Specifications



AC adapter may not be available in some countries.

| | |
|-------------------------------|---|
| Operating Environment | Temperature: 50°F to 95°F (10°C to 35°C) |
| | Humidity: 20% to 80% (non-condensation) |
| Dimensions: | 5.12" (W) x 6.41" (D) x 0.96" (H) (130mm x 162.8mm x 24.3mm) |
| Weight | Approx. 330g (11.6oz) Without PC card and interface cable |
| Power Sources: | Power from PC card slot: DC5V |
| | AC adapter: 100-240V, 50/60Hz |
| Interface: | ATAPI (Interface card:PCMCIA 2.1) |
| Buffer Size: | 128KB |
| Data Transfer Rate:*1 | <u>With power from PC card slot</u> <ul style="list-style-type: none"> • Normal mode: 800KB/s (inner:5.3x) to 1800 KB/s (outer:12x) • Power Save mode: 375KB/s (inner:2.5x) to 900KB/s (outer:6x) <u>With an AC adapter</u> <p>1275 KB/s (inner:8.5X) to 3000 KB/s (outer:20x) (When the vibration detect function works, 1100 KB/s (inner:7.3X) to 2400KB/s (outer:16x))</p> |
| Power Consumption: | Power from PC card slot (DC 5V) Max. 4.2W |
| | Power from AC adapter Max. 9.5W |
| Compatible CD, CD-ROM Format: | CD-DA (Audio CD)*1, CD-i*2, VIDEO CD*2, CD-ROM (Mode 1, Mode 2 Form 1), CD-ROM XA (Mode 2 Form 2), Photo CD*3 (Multisession compatible), CD Extra |
| PC card and Interface Cable: | Power source DC 5V, approx. 20mA |
| | Card type PCMCIA type II |
| | Cable length Approx. 15.75" (400mm) (without connector) |
| | Weight (with cable) Approx. 3.9oz (110g) |

*1 Audio CD titles can only be played if the computer has audio CD player software.

*2 CD-i or VIDEO CD titles can be viewed if the computer has software or hardware MPEG decoding capability.

*3 Software required for viewing Photo CD titles is not included.

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